

## Desktop Publishers

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### Significant Points

- Desktop publishers are expected to experience faster than average employment growth.
- Two out of three worked in firms that handle newspaper, periodical, book, and directory publishing, or printing and related support activities.
- Although formal training is not always required, those with certificates or degrees will have the best job opportunities.

### Nature of the Work

Using computer software, desktop publishers format and combine text, numerical data, photographs, charts, and other visual graphic elements to produce publication-ready material. Depending on the nature of a particular project, desktop publishers may write and edit text, create graphics to accompany text, convert photographs and drawings into digital images and then manipulate those images, design page layouts, create proposals, develop presentations and advertising campaigns, typeset and do color separation, and translate electronic information onto film or other traditional forms. Materials produced by desktop publishers include books, business cards, calendars, magazines, newsletters and newspapers, packaging, slides, and tickets. As companies have brought the production of marketing, promotional, and other kinds of materials in-house, they increasingly have employed people who can produce such materials.

Desktop publishers use a keyboard to enter and select formatting properties, such as the size and style of type, column width, and spacing, and store them in the computer, which then displays and arranges columns of type on a video display terminal or computer monitor. An entire newspaper, catalog, or book page, complete with artwork and graphics, can be created on the screen exactly as it will appear in print. Operators transmit the pages for production either into film and then into printing plates, or directly into plates.

Desktop publishing is a rapidly changing field that encompasses a number of different kinds of jobs. Personal computers enable desktop publishers to perform publishing tasks that would otherwise require complicated equipment and human effort. Advances in computer software and printing technology continue to change and enhance desktop-publishing work. Instead of receiving simple typed text from customers, desktop publishers get the material over the Internet or on a computer disk. Other innovations in the occupation include digital color page-makeup systems, electronic page-layout systems, and off-press color-proofing systems. In addition, because most materials today often are published on the Internet, desktop publishers may need to know electronic-publishing technologies, such as Hypertext Markup Language (HTML), and may be responsible for converting text and graphics to an Internet-ready format.

Typesetting and page layout have been affected by the technological changes shaping desktop publishing. Increasingly, desktop publishers are using computers to do much of the typesetting and page-layout work formerly done by prepress workers, posing new challenges for the printing industry. The old “hot type” method of text composition—which used molten lead to create individual letters, paragraphs, and full pages of text—is nearly extinct. Today,

composition work is done primarily with computers. Improvements in desktop-publishing software also allow customers to do much more of their own typesetting.

Desktop publishers use scanners to capture photographs, images, or art as digital data that can be either incorporated directly into electronic page layouts or further manipulated with the use of computer software. The desktop publisher then can correct mistakes or compensate for deficiencies in the original color print or transparency. Digital files are used to produce printing plates. Like photographers and multimedia artists and animators, desktop publishers also can create special effects or other visual images, using film, video, computers, or other electronic media. (Separate statements on photographers and on artists and related workers appear elsewhere in the *Handbook*.)

Depending on the establishment employing these workers, desktop publishers also may be referred to as publications specialists, electronic publishers, DTP operators, desktop-publishing editors, electronic prepress technicians, electronic-publishing specialists, image designers, typographers, compositors, layout artists, and web publications designers.

### Working Conditions

Desktop publishers usually work in clean, air-conditioned office areas with little noise. They generally work an 8-hour day, 5 days a week. Some workers work night shifts, weekends, and holidays.



Using computer software, desktop publishers capture photographs, images, or art as digital data that can be incorporated directly into electronic page layouts.

Desktop publishers often are subject to stress and the pressures of short deadlines and tight work schedules. Like other workers who spend long hours working in front of a computer monitor, they may be susceptible to eyestrain, back discomfort, and hand and wrist problems.

### **Employment**

Desktop publishers held about 35,000 jobs in 2002. Two out of three worked in the newspaper, periodical, book, and directory publishing, and printing and related support activities; the rest worked in a wide variety of industries.

Firms in the publishing industry employ most desktop publishers. These firms publish newspapers, periodicals, books, directory and mailing lists, and greeting cards. A large number of desktop publishers also work for printing and related support activities firms, which print a wide range of products—newspapers, books, labels, business cards, stationary, inserts, catalogs, pamphlets, and advertisements—while business form establishments print material such as sales receipts and business forms and perform support activities such as data imaging and bookbinding. Establishments in printing and related support activities typically perform custom composition, platemaking, and related prepress services. (A separate statement on prepress technicians and workers appears elsewhere in the *Handbook*.) Other desktop publishers print or publish materials in-house or in-plant for business services firms, government agencies, hospitals, or universities, typically in a reproduction or publications department that operates within the organization.

The printing and publishing industries are two of the most geographically dispersed industries in the United States, and desktop-publishing jobs are found throughout the country. However, most jobs are in large metropolitan cities.

### **Training, Other Qualifications, and Advancement**

Most workers qualify for jobs as desktop publishers by taking classes or completing certificate programs at vocational schools, universities, and colleges or through the Internet. Programs range in length, but the average certificate program takes approximately 1 year. However, some desktop publishers train on the job to develop the necessary skills. The length of on-the-job training varies by company. An internship or part-time desktop-publishing assignment is another way to gain experience as a desktop publisher.

Students interested in pursuing a career in desktop publishing may obtain an associate's degree in applied science or a bachelor's degree in graphic arts, graphic communications, or graphic design. Graphic arts programs are a good way to learn about desktop publishing software used to format pages, assign type characteristics, and import text and graphics into electronic page layouts to produce printed materials such as advertisements, brochures, newsletters, and forms. Applying this knowledge of graphic arts techniques and computerized typesetting usually is intended for students who may eventually move into management positions, while 2-year associate's degree programs are designed to train skilled workers. Students also develop finely tuned skills in typography, print media, packaging, branding and identity, Web-site design, and motion graphics. The programs teach print and graphic design fundamentals and provide an extensive background in imaging, prepress operations, print reproduction, and emerging media. Courses in other aspects of printing also are available at vocational-technical institutes, industry-sponsored update and retraining programs, and private trade and technical schools.

Although formal training is not always required, those with certificates or degrees will have the best job opportunities. Most employers prefer to hire people who have at least a high school diploma

and who possess good communication skills, basic computer skills, and a strong work ethic. Desktop publishers should be able to deal courteously with people, because, in small shops, they may have to take customers' orders. They also may have to add, subtract, multiply, divide, and compute ratios to estimate job costs. Persons interested in working for firms using advanced printing technology need to know the basics of electronics and computers.

Desktop publishers need good manual dexterity, and they must be able to pay attention to detail and work independently. Good eyesight, including visual acuity, depth perception, a wide field of view, color vision, and the ability to focus quickly also are assets. Artistic ability often is a plus. Employers also seek persons who are even tempered and adaptable—important qualities for workers who often must meet deadlines and learn how to operate new equipment.

Workers with limited training and experience may start as helpers. They begin with instruction from an experienced desktop publisher and advance on the basis of their demonstrated mastery of skills at each level. All workers should expect to be retrained from time to time to handle new, improved software and equipment. As workers gain experience, they advance to positions with greater responsibility. Some move into supervisory or management positions. Other desktop publishers may start their own company or work as independent consultants, while those with more artistic talent and further education may find opportunities in graphic design or commercial art.

### **Job Outlook**

Employment of desktop publishers is expected to grow faster than the average for all occupations through 2012, as more page layout and design work is performed in-house using computers and sophisticated publishing software. Desktop publishing is replacing much of the prepress work done by compositors and typesetters, enabling organizations to reduce costs while increasing production speeds. Many new jobs for desktop publishers are expected to emerge in commercial printing and publishing establishments. However, more companies also are turning to in-house desktop publishers, as computers with elaborate text and graphics capabilities have become common, and desktop publishing software has become cheaper and easier to use. In addition to employment growth, many job openings for desktop publishers also will result from the need to replace workers who move into managerial positions, transfer to other occupations, or who leave the labor force.

Printing and publishing costs represent a significant portion of a corporation's expenses, and firms are finding it more profitable to print their own newsletters and other reports than to send them out to trade shops. Desktop publishing reduces the time needed to complete a printing job and allows commercial printers to make inroads into new markets that require fast turnaround.

Most employers prefer to hire experienced desktop publishers. As more people gain desktop-publishing experience, however, competition for jobs may increase. Among persons without experience, opportunities should be best for those with computer backgrounds who are certified or who have completed postsecondary programs in desktop publishing or graphic design. Many employers prefer graduates of these programs because the comprehensive training they receive helps them learn the page-layout process and adapt more rapidly to new software and techniques.

### **Earnings**

Earnings for desktop publishers vary according to level of experience, training, location, and size of firm. Median annual earnings of desktop publishers were \$31,620 in 2002. The middle 50 percent

earned between \$24,030 and \$41,280. The lowest 10 percent earned less than \$18,670, and the highest 10 percent earned more than \$52,540 a year. Median annual earnings in the industries employing the largest numbers of these workers in 2002 are presented in the following tabulation:

Printing and related support activities .....	\$35,140
Newspaper, periodical, book, and directory publishers .....	28,050

### **Related Occupations**

Desktop publishers use artistic and editorial skills in their work. These skills also are essential for artists and related workers; designers; news analysts, reporters, and correspondents; prepress technicians and workers; public relations specialists; and writers and editors.

### **Sources of Additional Information**

Details about apprenticeship and other training programs may be obtained from local employers such as newspapers and printing shops or from local offices of the State employment service.

For information on careers and training in printing, desktop publishing, and graphic arts, write to either of the following sources:

- Graphic Communications Council, 1899 Preston White Dr., Reston, VA 20191. Internet: <http://www.npes.org/edcouncil/>
- Graphic Arts Technical Foundation, 200 Deer Run Rd., Sewickley, PA 15143. Internet: <http://www.gatf.org>

For information on benefits and compensation in desktop publishing, write to:

- Printing Industries of America, Inc., 100 Daingerfield Rd., Alexandria, VA 22314. Internet: <http://www.gain.org>